The opinion in support of the decision being entered today was $\underline{\text{not}}$ written for publication in a law journal and is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ARTHUR REGINALD GREEF,
THOMAS ROBERT MAGUIRE, and
FRANK CASTELLUCCI

Appeal No. 2001-2000 Application No. 08/964,096

ON BRIEF

Before THOMAS, DIXON and BLANKENSHIP, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 18-24, 26-30 and 32-35.

Representative claim 18 is reproduced below:

18. In an object oriented computer program product recorded on a recording medium, software for performing a method comprising the steps of:

storing in permanent storage a persistent class description including a unique class identifier of a class of objects and an initial set of one or more fields each field for a superclass from which the class of objects inherits attributes;

preparing for an object which is an instance of said class a nonpersistent version of said class description;

providing for said object a modified set of fields containing at least one modification to said initial set of fields such modification for a field for one of the superclasses from which the object inherits so that the object with the modified set of fields having the at least one modification is not an instance of said class; and

migrating the object to the modified set of fields in a persistent version by automatically storing in permanent storage with the migrated object the initial set of fields unchanged by the at least one modification along with any action necessary to change the initial set of fields to the modified set of fields to provide for any difference in the migrated objects inheritance pattern from that in the persistent class description so that the migrated object can be thereafter reproduced in temporary memory using the initial set of fields of the class stored with the migrated object.

The following references are relied on by the examiner:

Anderson et al. (Anderson) 5,499,365 Mar. 12, 1996 Cavanaugh, III (Cavanaugh) 5,809,507 Sep. 15, 1998 (filing date July 01, 1996)

Claims 18-24, 26-30 and 32-35 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Anderson in view of Cavanaugh.

Rather than repeat the positions of the appellants and the examiner, reference is made to the briefs and the answer for the respective details thereof.

OPINION

We reverse.

Each of independent claims 18, 24 and 30 on appeal in some manner recite a feature of migrating an object of an object-oriented programming system to a modified set of fields in a persistent version by automatically storing in permanent storage with the migrated object, the initial set of fields unchanged by at least one modification along with any action necessary to change the initial set of fields to the modified set of fields. It is these features on which appellants persistently argue patentability in the brief and reply brief and with which we agree.

As even the title of Anderson reveals, we also find ourselves in agreement with appellants' observations at the bottom of page 2 of the reply brief that the examiner and appellants view the teachings in Anderson as being based upon techniques that allow manipulation of different versions of objects. Appellants continue "this does not mean that any version of an object in Anderson is stored in permanent storage with a set of indexes for a class that is

not an instance along with actions required to conform that stored set to the true set of indexes." We agree.

Anderson's figure 1 shows memory elements within part of the overall computer environment 12. The relationship of any version of an object discussed in this reference to persistence (permanent storage) in any memory appears not to be disclosed in this reference. The various versions of an object in Anderson appear to be discussed in terms of real time or nonpersistent, temporary storage since no fields are modified in this reference to migrate the object as claimed in each independent claim on appeal, that is, to automatically store in permanent storage with a migrated object, the initial set of fields unchanged by at least one modification along with any action necessary to change the initial set of fields to the modified set of fields.

With all this said, we also tend to agree with appellants' observations at the top of page 3 of the reply brief. There, appellants express the view that Anderson

seems to follow the industry practice of storing with an object a set of fields of which the object is an instance and not with one which such a relationship does not exist. It is noted that each independent claim on appeal also requires that the object, with a modified set of fields having the modification, is not an instance of the class. We therefore tend to agree with appellants' continued statements at the middle of page 3 of the reply brief that according to conventional practice, if changes do affect an inheritance pattern of objects, they are permanently stored with indexes which reflect the new inheritance pattern and not with indexes which do not reflect that pattern and that are accompanied by actions to be performed by an object reader to reproduce a true set of indexes.

The examiner's various "interpretations" of the teachings of Anderson in the statement of the rejection of the independent claims at pages 5 and 6 of the answer appear to be not supported by the actual referenced teachings and

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do not go beyond general understandings in the objectoriented programming art that persistent objects are permanently stored.

At page 6 of the answer, the examiner relies upon Cavanaugh only for details relating to persistent class descriptions of which the examiner views Anderson as not providing explicit detail thereof. The entire disclosure of Cavanaugh relates to storing persistent objects according to different methodologies. The examiner has not pointed to any feature of Cavanaugh nor do we discern any which would make up for the deficiencies of Anderson, even assuming for the sake of argument that they are properly combinable within 35 U.S.C. § 103. Thus, Cavanaugh does not appear to relate to the specific requirements noted earlier of each independent claim on appeal relating to migrating the object.

Therefore, since the combination of Anderson and Cavanaugh does not appear to us to have yielded the subject matter of each independent claim on appeal, the decision of

the examiner rejecting them is reversed, as is the separate rejection of their respective dependent claims.

REVERSED

JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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